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FISH POND STOCKING

The enclosed material was produced by Jeff Blaser, Private Waters Specialist with the Nebraska Game and Parks Commission. Jeff provides some good information on the fish species that should usually not be stocked in most Nebraska Ponds. Additional information on Fish Pond Management is planned.

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Fish Not To Stock

Approximately 80% of warmwater ponds are located in the eastern third of the state. Largemouth bass, bluegill and channel catfish are the only fish recommended for stocking in those ponds – particularly new or recently renovated ponds. These three fish species work well together and develop into a balanced fishery that will likely only require an occasional supplemental stocking of channel catfish. The same three fish species should also be considered for the majority of warmwater ponds in other parts of the state. The following discussion explains what fish species should not be stocked and why.

Fathead Minnows Although fathead minnows are excellent prey fish for smaller bass, the larger adult fish need bigger prey. By using bluegill as the prey fish, less energy is expended to capture one 5 inch bluegill than would be expended to catch numerous minnows. We have also found that when we initially stocked a new lake with minnows, they spawned several times during a particular season. That resulted in producing an extremely high population of minnows that not only directly competed with stocked bluegill but also resulted in poor survival of young-of-the-year bluegill. On two different instances the bluegill didn't become established until a disease outbreak practically eliminated the fathead minnows.

Bluegill x Green Sunfish Hybrid Hybrid sunfish should only be stocked into a new or recently renovated pond where no other sunfish species are present. By eliminating competition with other sunfish species, hybrid growth is maximized. The initially stocked hybrids are the desirable 1st generation cross. This is not a sterile hybrid and they can and will spawn. The 1st generation cross produces a hybrid population that contains few females (85 to 95 percent males), subsequently, spawning and reproduction are low. Unfortunately, they do not breed true. Spawning produces 2nd generation offspring that are not desirable and exhibit a wide range of characteristics (either bluegill, green sunfish or another hybrid). If green sunfish become established, they can have a detrimental effect on the fishery. Hybrid sunfish must be stocked in combination with a predator (largemouth bass) so that most of the 2nd generation offspring can be eliminated, thereby limiting competition with initially stocked hybrids. Hybrid sunfish / bass ponds are not suited for producing a quality bass population because hybrids don't produce enough offspring for prey. Since the 2nd generation is not desirable, hybrid populations are not self-perpetuating and will have to be periodically restocked with preferably larger (3 to 4 inches) hybrid fingerlings.

Florida Strain Largemouth Bass We don't know of any instances when they have out performed our native bass. Florida strain bass may actually have similar or perhaps even slower growth rates than native bass due to our shorter growing season when compared to it's home range. Research has indicated that Florida bass will not survive Nebraska winters in most situations. Thus are a waste of money. There is also a concern that Florida bass may hybridize with native bass and produce an inferior hybrid.

Crappie They tend to overpopulate if there is not enough predation on the young. Crappie can also negatively affect growth and survival of bluegill and small bass by direct competition and predation.

Grass Carp They should only be stocked in ponds which have severe submergent vegetation problems that are negatively impacting the fish populations. The best solution would be to create more deeper water which would hinder the growth of aquatic vegetation. **Grass carp will have no appreciable effect on algae species commonly referred to as moss or pond scum.** If the pond owner only wants to create fishing lanes or swimming beach, an aquatic herbicide should be used instead. If a pond only has a narrow band of vegetation, don't stock grass carp because they will eliminate habitat that bass and bluegill need. When grass carp are utilized, they can be stocked at a rate of 5-15 per surface acre of water that contains aquatic vegetation problem. Do not over stock grass carp. They are long lived (10 to 15 years) and can attain a weight of 50 pounds or more. During the summer months they can eat up to 3 times their weight in aquatic vegetation. Remember, it is vegetation control and not total elimination of vegetation. A common problem that occurs with the elimination of submergent vegetation are planktonic algae blooms. In order to avoid predation by adult bass, stocked grass carp should be at least 10 inches long.

Channel Catfish Fingerling catfish should only be used for initial stockings. If a pond has adult bass present, catfish should be stocked at a rate of 10 to 20 per acre and at least 10 inches long in order to ensure survival. Catfish will reproduce in a pond if spawning habitat is available. However, if the pond has good water clarity, chances are the young catfish will not survive due to bass predation. In order to maintain catfish in a clear pond, they will have to be restocked every 2^{nd} or 3^{rd} year at the rate and size previously mentioned.

Carp and Black Bullhead Although a well established bass population can control both species, overpopulation problems will occur if the pond is muddy or few bass are present. Feeding habits of both of these primarily bottom feeding species (particularly carp) results in stirring up mud, especially if high populations of either species are present. Consequently, they are undesirable if sight feeding bass and bluegill are desired.

Other Species Northern pike, walleye, smallmouth bass, flathead catfish, salmon and trout maybe desired by some pond owners. Although they normally do not cause problems, they are not suited to majority of warmwater pond environments. They do not reproduce (if at all) adequately in ponds to maintain their own numbers, therefore, they are costly to stock, maybe difficult to obtain and a pond cannot support many of them. Since a properly managed largemouth bass population will control bluegill, no additional predators are necessary. Most ponds cannot support trout or salmon year around. Both require water temps below 70 F and a high oxygen content, which doesn't occur naturally in most ponds during the summer months.

A farm pond management manual will be produced in the near future. The fish stocking section of the manual will also include fish species that can be considered for coldwater ponds, selective warmwater ponds and natural lakes. The stocking section will also discuss problems associated with stocking the following fish species: Kentucky spotted bass, blue catfish, golden shiner, white bass, sauger and gizzard shad. Jeff Blaser, Private Waters Specialist, can be contacted by phone (402-471-5435) or E-mail (jblaser@ngpc.state.ne.us) if you have any questions or comments about this stocking information or pond management in general.